

CLAIMS

1. Powder product for the protection of centrifugal casting moulds used for the manufacture of cast iron pipes, comprising an inoculating alloy to which inert mineral powders are possibly added,  
5 characterized in that it also contains a strongly reducing metal that is volatile at the temperature of the liquid cast iron.

2. Product according to claim 1, characterized in that the inoculating alloy used is a mix of several  
10 inoculating alloys.

3. Product according to either of claims 1 or 2, characterized in that the reducing volatile metal is an element in column 2 in the Mendeleiev classification.

4. Product according to claim 3, characterized in  
15 that the volatile reducing metal is an element in subgroup 2a in the periodic table of elements.

5. Product according to claim 4, characterized in that the reducing and volatile metal used is magnesium or calcium.

20 6. Product according to one of claims 1 to 5, characterized in that the reducing and volatile metal used comprises 0.3 to 18% by weight of the product.

7. Product according to one of claims 1 to 6, characterized in that the reducing metal used is added  
25 in the form of one or several non-ferrous alloys, typically containing less than 10% of Fe.

8. Product according to claim 7, characterized in that the non-ferrous alloy is an SiCa alloy containing the following (by weight):

30 Si 58 - 65%; Ca 27 - 35%; Fe 2 - 7%; Al 0.4 - 2%.

9. Product according to claim 8, characterized in that it contains between 15 and 40% by weight of SiCa alloy.

10. Product according to either of claims 5 or 6, characterized in that it contains between 0.5 and 2% of magnesium.

11. Product according to one of claims 1 to 10, characterized in that it contains between 0.2 and 15% of inert mineral powder.

12. Product according to claim 11, characterized in that the inert mineral powder used is a calcium fluoride, a magnesium fluoride or a mix of these two fluorides.

13. Product manufacturing process according to one of claims 1 to 12, characterized in that the reducing and volatile metals are added into the mix in the form of a premix with inert mineral powders.

14. Process according to claim 13, characterized in that the metals constitute 15 to 60% by weight of the premix.